Performance Tasks for Grade four, primary stage, second term

(1) Energy Transfer

Selim has waked up, had his breakfast, said good bye to his family, and took his bike to school. When he arrived to school, he used a musical instrument during the morning school line, and then he went up the stairs to his classroom. He switched on the electric lamp and the fan of the classroom.

1- Determine the forms of energy transfer in the previous text, then complete the table:

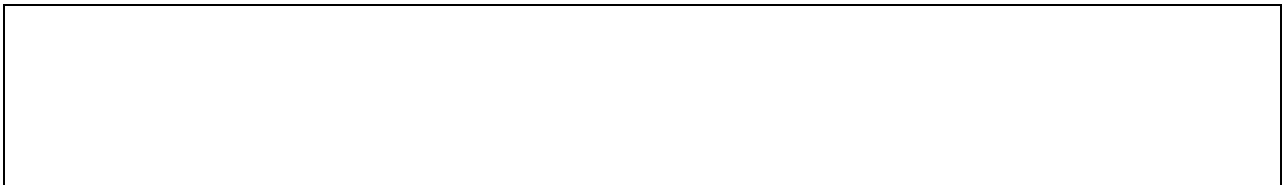
Device name	The energy consumed	The energy produced

2- Choose another model that we use in our daily activity and determine the energy transfer in it.

Device name: ……………………………

The energy consumed: ……………………….

The energy produced: …………………………..

Performance Task 2

Energy Path

Follow the energy path using graphs starting from the source of energy to the produced energy (energies) to the following devices:

1- **Toy car operating by batteries**

2- **Gas flame**

3- **The robot used on the moon surface**

4- **Electric washing machine**

Performance Task 3

Types of fuel

Complete the following chart. Then, complete the following sentences

Complete the following sentences

- The origin of all the types of fuel is …………………..
- The wind energy is used to generate ……………………..
- The coal is extracted from ……………………..

Performance Task 4

Formation of fossil fuels

Choose the right sentences from the table and put them in its right place

Performance Task 5

The electrical energy production

the following pictures express resources we use to generate electricity

- **Determine what the following pictures express**
- **Classify them into renewable and non-renewable resources**

.... (2)

.... (1)

.... (4)

.........................(3)

...............................(5)

Complete the following table and determine the resource type: renewable or non- renewable

Picture number	The source of energy	renewable sources	Non- Renewable resources

Performance Tasks for Grade four, primary stage, second term

(1) Energy Transfer

Selim has waked up, had his breakfast, said good bye to his family, and took his bike to school. When he arrived to school, he used a musical instrument during the morning school line, and then he went up the stairs to his classroom. He switched on the electric lamp and the fan of the classroom.

1- **Determine the forms of energy transfer in the previous text, then complete the table:**

Device name	The energy consumed	The energy produced
Bike	chemical	kinetic
Musical instrument	kinetic	sound
Electric lamp	electric	light and thermal
Fan	electric	kinetic and thermal

2- **Choose another model that we use in our daily activity and determine the energy transfer in it.**

Device name: .... TV

The energy consumed: .... electric

The energy produced: .... sound and light

Performance Task 2

Energy Path

Follow the energy path using graphs starting from the source of energy to the produced energy (energies) to the following devices:

1- Toy car operating by batteries

2- Gas flame

Chemical energy stored in natural gas➡️burning gas➡️thermal energy

3- The robot used on the moon surface

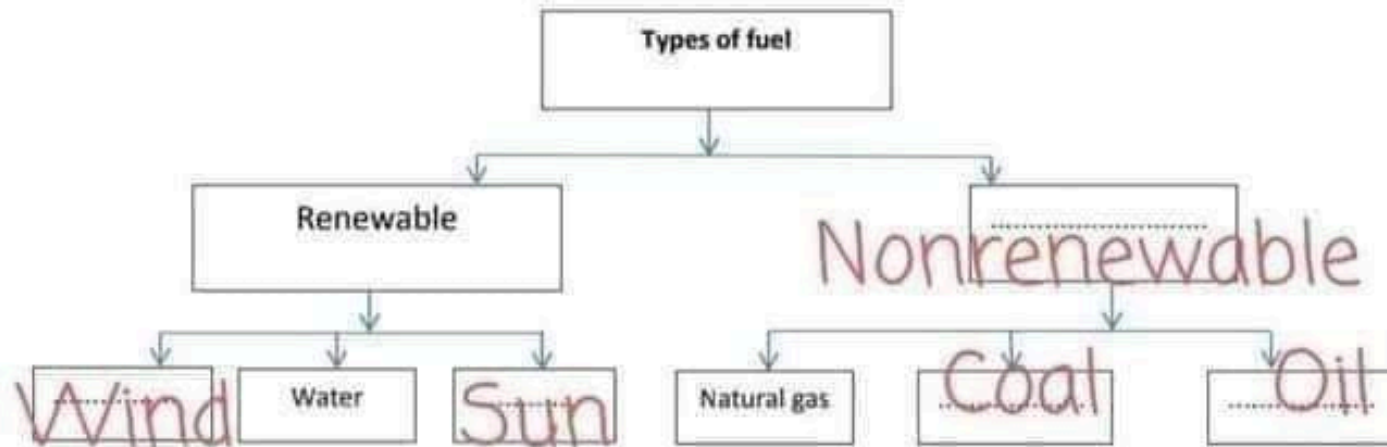
Solar energy in solar panels➡️electric energy➡️kinetic and thermal energies

4- Electric washing machine

Electric energy in washing machine➡️ kinetic and sound energies

Performance Task 3

Types of fuel

Complete the following chart. Then, complete the following sentences

Complete the following sentences

- The origin of all the types of fuel is .... sun
- The wind energy is used to generate .... electricity
- The coal is extracted from .... under earth surface

Performance Task 4

Formation of fossil fuels

Choose the right sentences from the table and put them in its right place

Stages of coal formation

1.The wood of trees....

-2 -1

2.It is formed from the remains of...

3.It is covered with layers.

-4 -3

4.It is formed by......

Stages of oil formation

1.The stability of marine organisms...

-2 -1

2.It is formed from the decomposition....

3.It is covered with layers.

-4 -3

4.It is formed by....

It is formed from the decomposition of dead marine organisms
It is formed from the remains of wood from the forests from ancient times
The stability of marine organisms in the ocean floor for millions of years.
The wood of trees is buried under the layers of the earth for many years
It is covered with the layers of sediment and rocks over time.
It is formed by the pressure and heat

Performance Task 5

The electrical energy production

1. Coal (nonrenewable)

the following pictures express resources we use to generate electricity

2.Oil (nonrenewable)

- **Determine what the following pictures express**
- **Classify them into renewable and non-renewable resources**

.... (2) .... (1)

.... (4) ....(3)

...................................(5)